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ABSTRACT

This paper summarizes what is known about the effects of Texas policies to raise academic standards, measure student performance, and impose consequences for results over the past decade. A careful review of the best available evidence shows that, while Texas has not yet achieved an education "miracle," the state has taken several steps forward and achieved some real successes. The Texas reforms have made a positive difference for students overall, especially for low-income and minority children. Texas still has a long way to go to improve the system enough for every student at every level. Texas has seen dramatic increases in passing rates across all grade levels and subjects on the Texas Assessment of Academic Skills (TAAS) examinations with equally dramatic decreases in test-score differences according to racial and socioeconomic status. Texas also ranked among the top states on the 1996 National Assessment of Educational Progress (NAEP) grade assessment, with Texas students tied for the highest gain in mathematics achievement from 1992 to 1996. Texas students scored well above average on the NAEP writing assessment in 1998. NAEP data are particularly impressive for African American students. The evidence also indicates that the gains have not come at the cost of higher dropout rates. High school completion rates in Texas have increased over the past 8 years. There are still substantial achievement gaps in Texas between different groups of students on state tests and NAEP assessments. Too many students fail to complete high school, and the state still has a long way to go to raise academic standards and student achievement so that all students graduate from high school and enroll in higher education ready to tackle college-level work. (Contains 12 tables and 16 figures.) (SLD)

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Real Results, Remaining Challenges: The Story of Texas Education Reform

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The Education Trust

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The Education Trust was created to promote high academic achievement for all students, at all levels, kindergarten through college. While all schools and colleges could better serve their students, the Education Trust's work focuses on the schools and colleges most often left behind in efforts to improve education: those serving low-income, Latino, African American and Native American students.

Real Results, Remaining Challenges: The Story of Texas Education Reform

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The Education Trust

Commissioned by The Business Roundtable
April 2001

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Introduction

Texas has become a touchstone in the national debate about the merits of student testing and education accountability. This paper briefly summarizes what we know about the effects of Texas policies to raise academic standards, measure student performance, and impose consequences for results over the past decade.

A careful review of the best available evidence shows that, while Texas hasn't yet achieved an education "miracle," the state has taken several steps forward and achieved some real successes. And those successes are not just "myths." The Texas reforms have made a positive difference for students overall, and particularly for low-income and minority children. But Texas—like every other state—still has a long way to go to improve the system *enough*, for every student, kindergarten through college.

Specifically, Texas has seen dramatic increases in passing rates across all grade levels and subjects on the state's Texas Assessment of Academic Skills (TAAS) exams, coupled with equally dramatic decreases in racial and socioeconomic gaps on those tests. In addition, Texas ranked among the top states on the 1996 National Assessment of Educational Progress (NAEP) 4th grade math assessment, with Texas students tied for the highest gain in math achievement from 1992 to 1996. And the state scored well above the national average on NAEP's first-ever writing assessment in 1998, with only one state—Connecticut—achieving a score that was statistically higher.

The NAEP data are particularly impressive for the state's African American students, who outscored their counterparts nationally and in every other state on NAEP's 1996 4th grade math and 1998 8th grade writing assessments. In fact, the state's African American students matched or outscored White students in seven other states on the 1998 NAEP writing test—a first for NAEP.

This paper presents compelling evidence that those gains have not come at the cost of higher dropout rates, as some critics claim. Depending on how they are measured, high school completion rates in Texas actually have been going up over the past eight years. The state

currently has high school completion rates that are slightly below the national average overall and for White and Latino students, but above average for African-American students.

At the same time, the task of improving education is far from over in Texas. There are still substantial achievement gaps between different groups of students on state tests and NAEP assessments. Too many students—particularly African American and Latino students—fail to complete high school. And the state has a long way to go to raise academic standards and student achievement high enough that all students graduate from high school and enroll in higher education ready to tackle college-level work.

Standards and Accountability: The Texas Twist

Outside the state, and particularly in elite Northeastern schools of education, Texas is often accused of a kind of unthinking heavy-handedness in its approach to education reform: Focus on basic skills; do a lot of testing; punish adults in schools that don't meet the mark; and deny diplomas to students who can't pass the tests.

The truth is more complicated, more interesting, and—just perhaps—more instructive. In fact, the state has engaged in an unusually intentional and sustained brand of policymaking over the past ten years. The result has been an unique mix of pragmatism and optimism in its approach to standards-based education reform.

Texas has made one of the longest-running attempts to raise academic standards among the 50 states. The state first began testing students in 1980 with the Texas Assessment of Basic Skills (TABS), an exam meant to measure minimum competencies. In 1985, students began taking a revamped version called the Texas Educational Assessment of Minimal Skills (TEAMS). Beginning in 1990, the state introduced the Texas Assessment of Academic Skills (TAAS), a criterion-referenced exam pegged to a statewide curriculum.

Texas also was one of the first states to hold students and education employees accountable for the results of such exams. In 1991-92, the state began requiring all students to pass the 10th grade TAAS test in order to graduate from high school. Beginning in 2003, the state will begin using TAAS scores to make decisions about grade level promotion of students in some grades,

and the class of 2005 will be required to pass a more rigorous new exit test in order to graduate. Beginning in 1993, schools and districts became subject to a rating system and consequences based on the proportion of students who meet certain passing rates on the tests.

That description sounds a lot like how education reform has taken shape in other states, and in many ways it is. But in any accountability system, the devil is in the details, and a broad description of the Texas system inevitably leaves out two features that are particularly noteworthy. The first reveals the state to have been more optimistic and high-reaching than most other states. The second reveals it to have been more pragmatic.

Optimism: Expect all groups of students to meet achievement benchmarks, and hold schools accountable for getting them there

In many states, efforts to raise standards have unearthed an ugly reality beneath the rhetoric that "all children can learn." Too many policymakers simply don't believe poor and minority children can achieve as much as their more privileged counterparts. Some wait until test scores come out and blame achievement gaps on poverty, dysfunctional families, student apathy or any number of such "external" excuses for the system's failure to teach all students to expected levels; their rhetoric reveals they never expected "those students" to meet the goals at all. Others have gone as far as to codify those lower expectations into policy, setting lower benchmarks for schools that serve high concentrations of poor students.

Education leaders in the Lone Star State have taken a radically different approach. Until very recently, Texas was the only state to separately report test scores (in this case, passing rates on TAAS) for different groups of students, including poor and minority children, while at the same time evaluating schools and districts based on a common test-score target (again, passing rates on TAAS) that must be *met by each group*. For example, this year schools and districts can avoid being labeled as low-performing only if 50% of their students—and 50% their African American, Latino, White, and low-income students considered separately—pass the TAAS tests. Such a policy, which reverses the usual "bell curve" way of thinking about achievement, is nothing short of revolutionary. And that expectation isn't hidden in some corner of the state's policy framework; it is spelled out quite prominently in the Texas accountability manual and other documents meant to drive systemic change.

Setting Clear and Equitable Goals

Only a handful of states base their school accountability policies on disaggregated test scores. The following box, taken directly from the 2001 Texas Accountability Manual, makes clear to schools and districts that they cannot ignore poor and minority students in their efforts to meet state accountability benchmarks:

TABLE 1: ACCOUNTABILITY RATING STANDARDS FOR 2001

	Exemplary †	Recognized †	Academically Acceptable / Acceptable	Academically Unacceptable / Low-performing
Base Indicator Standards				
Spring 2001 TAAS • Reading • Writing • Mathematics	at least 90.0% passing each subject area ("all students" & each student group *)	at least 80.0% passing each subject area ("all students" & each student group *)	at least 50.0% passing each subject area ("all students" and each student group *)	below 50.0% passing any subject area ("all students" or any student group *)
1999-2000 Dropout Rate	1.0% or less ("all students" and each student group *)	3.0% or less ("all students" and each student group *)	5.5% or less ("all students" and each student group *) ‡	above 5.5% ("all students" or any student group *) ‡

† A district cannot be rated *Exemplary* or *Recognized* if it:
- has one or more *Low-performing* campuses; or
- has 1,000 or more, or 10.0% or more, 1999-2000 students in grades 7-12 who were not reported either as enrolled or as leavers in the 2000-2001 PEIMS Submission 1.

* Student groups are African American, Hispanic, White, and Economically Disadvantaged.

‡ If a district or campus would be rated Academically Unacceptable / Low-performing solely because of a dropout rate exceeding 5.5% for a single student group (not all students), then the district or campus will be rated Academically Acceptable / Acceptable if that single dropout rate is less than 10.0%, and has declined from the previous year.

Source: Texas 2001 Accountability Manual.

Pragmatism: Set goals that are within reach and raise them incrementally over time

Texas also took a different approach when deciding how high to set the bar for school and districts in its accountability system. Rather than setting very high initial targets, as a number of other states have done, Texas intentionally set its bar just above where the system had been performing up to 1993 and then raised it incrementally the course of the decade. Like a magnet that can pull a metal object only if one positions it close enough and then moves it slowly away, the Texas reforms met schools where they were and pulled them into higher performance over time. Importantly, the changes never came as a surprise; the Texas Education Agency notifies districts of upcoming changes to the testing program or accountability requirements up to two years in advance.

Raising the Bar Inch by Inch

TAAS Passing Rate Targets for Reading, Writing, and Mathematics (GR. 3-8, 10) (must be met by all students overall *and by each individual student group*):

	1995	1996	1997	1998	1999	2000	2002*
Exemplary	90%	90%	90%	90%	90%	90%	90%
Recognized	65%	70%	75%	80%	80%	80%	80%
Academically Acceptable/ Acceptable	25%	30%	35%	40%	45%	50%	55%
Academically Unacceptable/ Low-performing	< 25%	< 30%	< 35%	< 40%	< 45%	< 50%	< 55%

* Only dropout rate targets changed in 2001.
Source: Texas 2001 Accountability Manual.

Education Week's latest *Quality Counts* report on state education reforms characterized that approach as "inch by inch." Uri Treisman, who directs the Charles A. Dana Center at the University of Texas at Austin, credits it with raising student achievement while avoiding the controversies that accountability policies have sparked in some other states. "The fact that the state was able to set passing standards and ratchet them up five points every year was the genius of the system," he told *Education Week*.

Of course, starting out low and aiming higher over time might not work for all states. Too often states start out low only to stay there. The particular genius of the Texas approach lies in raising the bar by attainable increments over time.

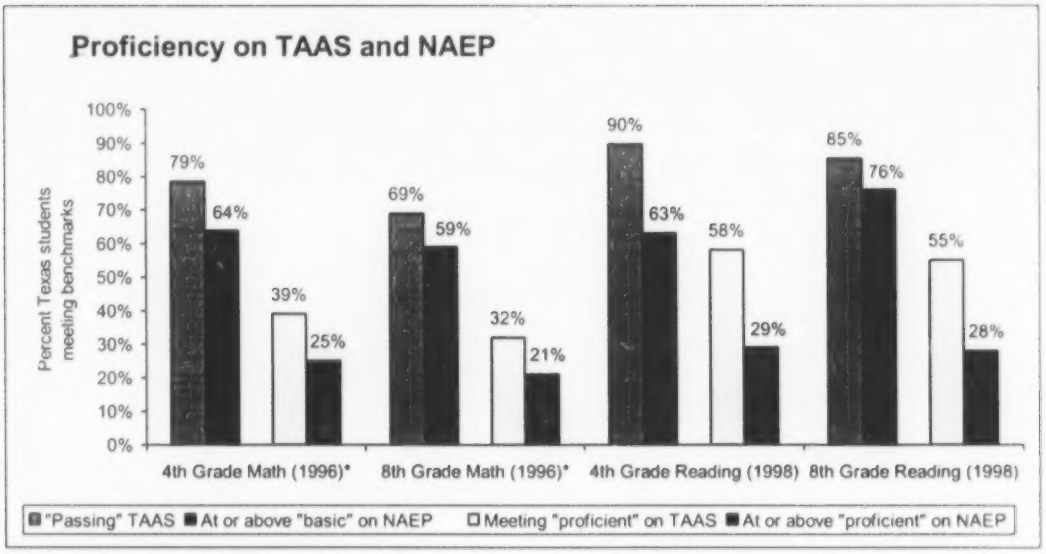
TAAS Tests: Low-Level but Getting Tougher

While Texas has taken an innovative approach to crafting its accountability policies, no one, including Texas education officials, would argue that current TAAS tests do a very good job of assessing sophisticated kinds of knowledge and skills. On the one hand, TAAS tests deserve credit for being criterion-referenced exams, which report on student attainment of a specific and explicit body of knowledge and skills, rather than norm-referenced tests, which report on how students perform against their peers. Only criterion-referenced exams can provide very useful information about the progress of students in a standards-driven system. Texas was one of the first states to switch from norm-referenced to criterion-referenced testing, and, unlike a number

of other states, has avoided subsequent pressure to water down its testing system with old-fashioned tests built on bell-curve assumptions about student achievement.

On the other hand, the current TAAS tests fall short in two important areas. First, the tests rely too heavily on multiple-choice questions rather than aiming for a balance between multiple-choice and open-ended test items. According to information reported in the latest *Quality Counts* report from *Education Week*, Texas is one of only twelve states that include no short-answer or extended-response questions on tests in academic subjects other than language arts.

Second, TAAS tests are weighted toward less-challenging subject matter and have fairly low-level achievement benchmarks. One way to get a handle on the academic rigor of TAAS tests is to compare proficiency-level results on TAAS with similar results on the National Assessment of Educational Progress. Such an analysis reveals the TAAS "passing" benchmark to be more equivalent to the NAEP "basic" level than to the NAEP "proficient" level. In fact, TAAS does have a kind of *de facto* "proficient" benchmark—85 or above on a TAAS-related measure called the Texas Learning Index—that is little known within the state because it is not widely used for accountability reporting, ratings, or consequences. Finally, even assuming that TAAS "passing" is equivalent to NAEP "basic" and TAAS "proficient" to NAEP "proficient," Texas students have an easier time meeting benchmarks on the Texas exams than they do on the national assessments.



NOTE: Percent of students meeting TAAS "proficient" level in math are for 1996-97, the earliest year for which such data are available from the TEA Web site. "Proficient" on TAAS defined as a score of 85 or above on Texas Learning Index.
Source: National Center for Education Statistics and Texas Education Agency Web sites.

The TAAS 10th grade exit exam is no different. In fact, the exit exam is widely acknowledged to measure only 8th-grade-level knowledge and skills. While the TAAS tests are probably no more low-level than tests used in many states (no one has conducted a 50-state analysis), a 1999 study by the Education Trust found that the 10th grade TAAS exam included far fewer items from higher-level math topics than did tests in Kentucky, Massachusetts, and New York.

Distribution of Topics on High School Math Tests

	Texas TAAS	Massachusetts MCAS 10	New York Regents	Kentucky CATS	TerraNova	Stanford 9**
Algebra 1	12%	23%	29%	9%	14%	29%
Geometry	23%	28%	26%	33%	29%	25%
Algebra 2	0%	13%	9%	20%	0%	0%
Trigonometry/Precalculus	0%	5%	3%	0%	0%	0%
Algebra 2 + Trigonometry	0%	18%	10%	20%	0%	0%
Data, Probability, and Stats	3%	13%	9%	17%	23%	25%
Number*	53%	18%	26%	18%	21%	21%

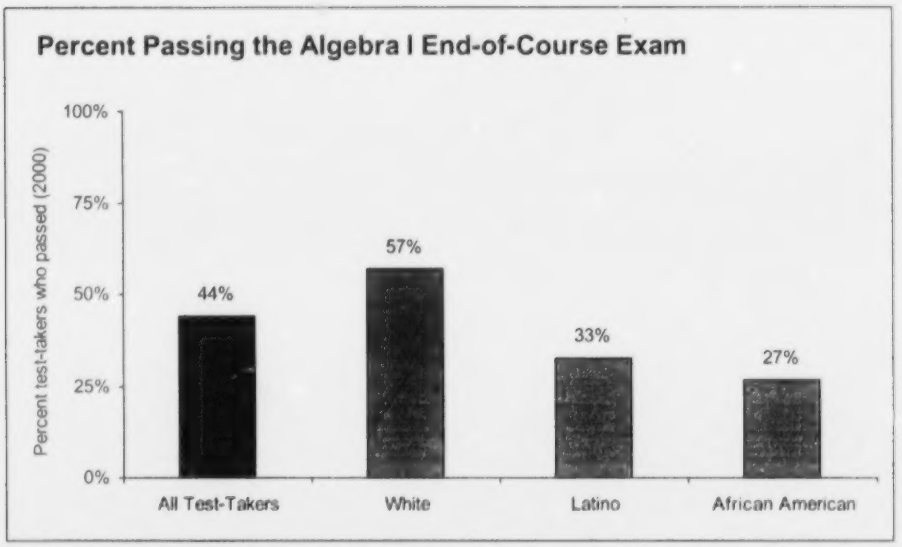
NOTES: *Number includes number and number theory, arithmetic, combinatorics, and logic. **Multiple choice test.
Source: The Education Trust, "Ticket to Nowhere," fall 1999.

None of this would come as a surprise to Texas education officials. The current TAAS tests were designed to measure learning goals adopted over a decade ago, and they reflect those standards. But that is all about to change. During the 1990s Texas officials spent a considerable amount of time and energy revamping the statewide curriculum, known as the Texas Essential Knowledge and Skills. Beginning in 2003 the state will use a new testing program—called TAAS II—to measure its new, higher standards.

The biggest changes for Texas students will be in the TAAS exit test. Unlike the current test, which covers only language arts and math, the new exam will span all four core academic subjects and require knowledge of the content covered in Algebra I, geometry, biology, chemistry, physics, English III, early American history, and U.S. history. The exam also will move from 10th to 11th grade, another signal that it will cover more rigorous material. The first students who must pass the test belong to the class of 2005; they will take the test as juniors in spring 2004.

Those changes are sure to test the mettle of the state's commitment to educational accountability. In March the Texas Education Agency released a report warning that high schools will face massive failure rates on the test unless they act soon to improve instruction. According to the report, at least three out of five students would fail the test—and be denied a diploma—if they took the new exam this year.

That estimate uses passing rates on high school end-of-course exams, which currently carry no consequences. A glance at passing rates on the end-of-course exams is indeed revealing. In 2000, although just 18% of students took the Algebra I exam, only 44% of them passed it. Just as alarming, although African American and Latino students took the Algebra test at approximately the same rate as White students, only 33% of Latino test-takers and 27% of African American test-takers passed the Algebra I test, compared with 55% of Whites.



NOTE: Eighteen percent of Latino and 17% of White and African American students in the relevant grades took the Algebra end-of-course exam in spring 2000.
Source: Texas Education Agency, Academic Excellence Indicator System, 1999-2000 State Performance Report

Participation and Exclusion Rates on TAAS Tests: A Mixed Bag

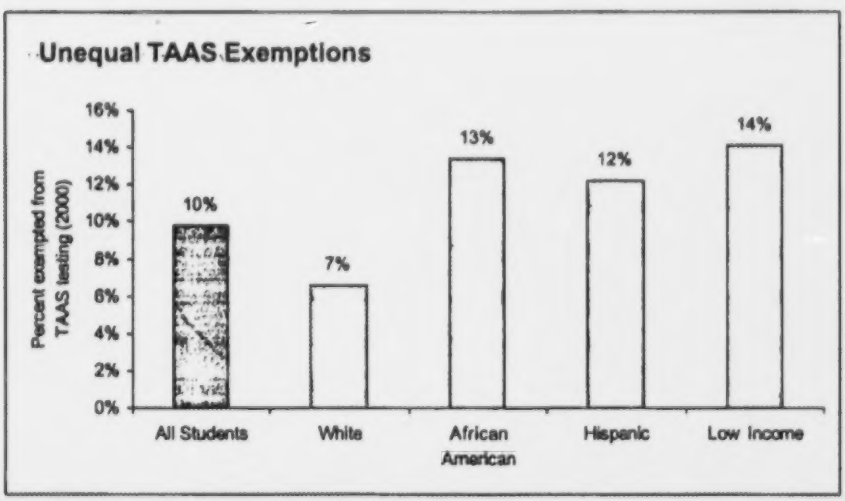
Texas has made real progress when it comes to including more students in its testing and accountability process over the past decade. In 1995, school and district accountability ratings included only regular education students tested on English-language versions of the exams. In 1999, the state began including the test scores of special education students, as well as limited-English proficient students taking Spanish-language versions of TAAS for reading and writing in grades three and four. Last year (2000) the rating system added Spanish-language test-takers for reading and writing in grades five and six, and results from Spanish-language writing tests in grades three through six.

Moreover, the data reveal that higher-rated schools actually exempt *fewer* students from TAAS tests. If schools at risk of failing to meet accountability benchmarks are attempting to beat the system through TAAS exemptions, as some critics have suggested, the strategy doesn't appear to be working.

Exclusion Rates on TAAS Exams, 2000

		Total	Exemplary School Rating	Recognized School Rating	Acceptable School Rating	Low-Performing School	Alternative Education School	All Other Schools
Not Tested	Absent	1%	0%	0%	1%	2%	5%	2%
	Special education exempt	7%	6%	7%	7%	7%	5%	10%
	Limited English proficient exempt	1%	1%	1%	2%	3%	6%	1%
	Other	1%	0%	1%	1%	2%	5%	4%
Tested	Science & social studies only	0%	0%	0%	0%	0%	0%	0%
	Not enrolled in same district	5%	4%	4%	5%	6%	18%	26%
	Used in accountability ratings	85%	89%	86%	85%	81%	61%	57%

On the other hand, when viewed through the lenses of race and poverty, the data suggest cause for concern over TAAS exclusion rates. Exemption rates for Latino and African American students are higher than those for Whites, and low-income students have the highest rate of all. Distressingly, African American students are about twice as likely as White students to be exempted from TAAS tests, primarily because they are much more likely to be enrolled in special education programs.



Source: Texas Education Agency, 2001 Accountability Manual.

TAAS Passing Rates Have Improved While the Gap Has Shrunk

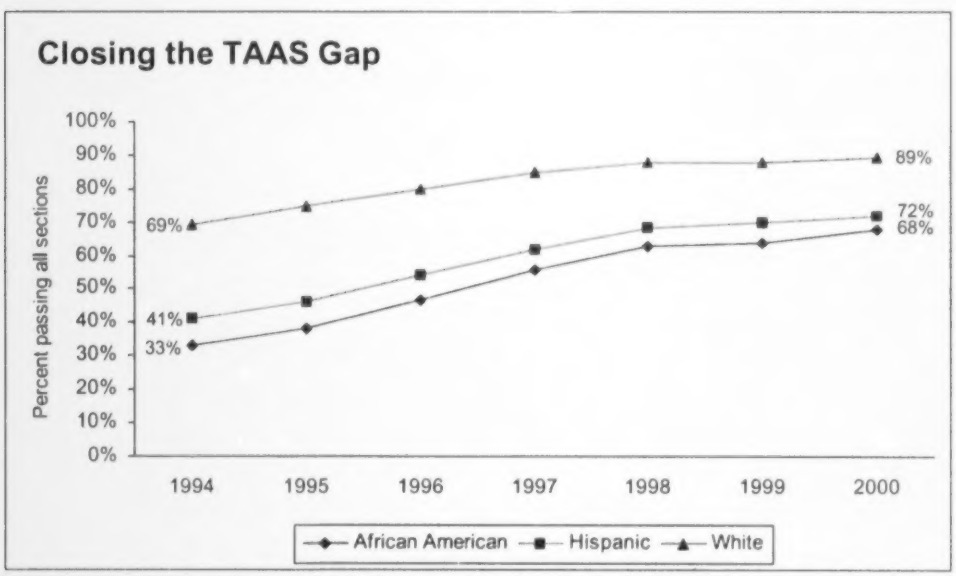
Passing rates on current TAAS exams have improved dramatically since the tests were fully implemented in 1994—even over the past few years as the state has included more students in the results. Statewide, the percentage of students passing all sections of the exam increased from 56% that year to 80% in 2000. As the following table shows, poor and minority students have

made the most dramatic gains. As a result, the large achievement gaps evident in 1994 have shrunk substantially: from 28 to 17 percentage points for Latino students, and from 36 to 21 percentage points for African American students.

Percentage Passing TAAS Exams: Grades 3-8 & 10

	All Sections			Reading			Math			Writing		
	1994	2000	Gain	1994	2000	Gain	1994	2000	Gain	1994	2000	Gain
All Students	56	80	+24	77	87	+11	61	87	+27	79	88	+9
African American	33	68	+35	60	81	+21	38	77	+39	66	82	+17
Latino	41	72	+31	65	81	+16	47	83	+36	70	82	+13
White	69	89	+20	87	94	+7	73	94	+20	88	94	+6
Low-Income	39	70	+31	63	80	+17	45	81	+36	68	81	+14

Source: Texas Education Agency Web site. Rates are for all test-takers in grades 3-8 and 10. Data have been rounded, so figures in "gain" and "1994" columns might not add up to figure in "2000" column.



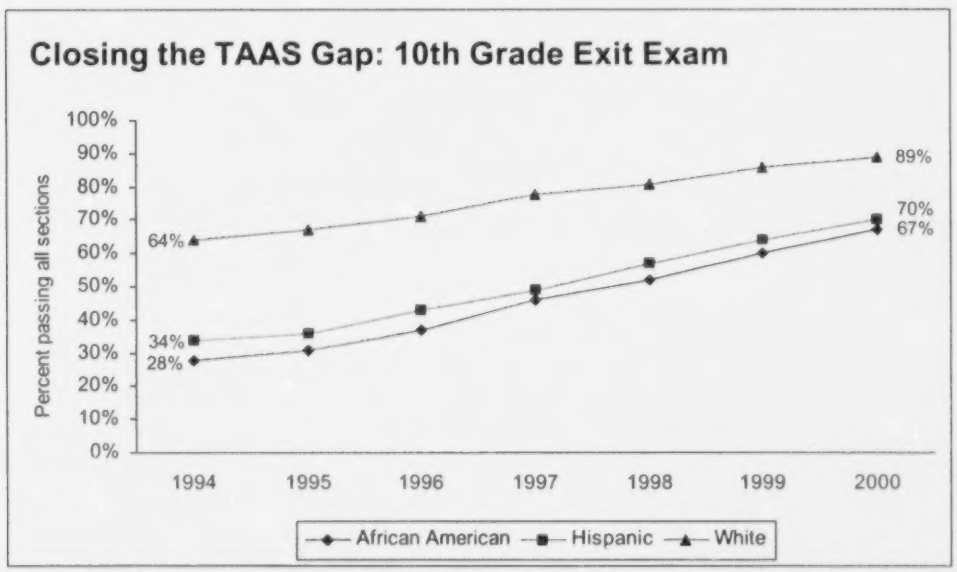
Source: Texas Education Agency Web site. Data are for all test-takers in grades 3-8 and 10.

Passing all sections of the 10th grade TAAS has been a prerequisite for high school graduation since 1991-92. The following table shows the progress each student group has made in meeting that requirement in the 10th grade. The percentage passing the test as 10th graders improved from 50% in 1994 to 80% in 2000. Moreover, because the rate for minority students has improved at a greater pace than for White students, the large gaps evident in 1994 have shrunk substantially: from 30 to 19 percentage points for Latino students, and from 36 to 22 percentage points for African American students.

10th Grade Passing Rates on TAAS Exit Exam

	All Sections			Reading			Math			Writing		
	1994	2000	Gain	1994	2000	Gain	1994	2000	Gain	1994	2000	Gain
All Students	50	80	+30	75	90	+15	55	86	+31	79	90	+11
African American	28	67	+39	60	85	+25	32	74	+42	68	86	+18
Latino	34	70	+36	61	83	+22	40	80	+40	69	84	+15
White	64	89	+25	86	96	+10	68	93	+25	88	96	+8
Low-Income	32	68	+36	58	82	+24	39	79	+40	66	83	+17

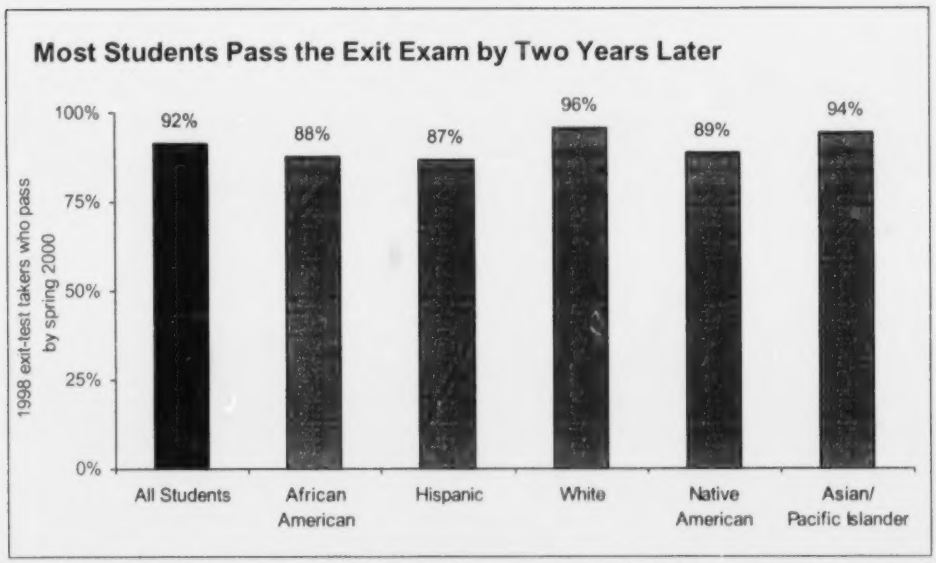
Source: Texas Education Agency Web site. Rates are for 10th graders only, and do not include those who fail the exam but subsequently take it in 11th or 12th grade.



Source: Texas Education Agency Web site. Rates are for 10th graders only, and do not include those who fail the exam but subsequently take it in 11th or 12th grade.

However, the above data only show the proportion of students who passed the 10th grade TAAS exit exam when they took the test as 10th graders. Students who fail one or more sections of the exit-level TAAS have eight additional opportunities to pass the exam before they graduate.

According to data reported by school districts to the Texas Education Agency, 92% of students who took the exit exam in spring of 1998 and then stayed in the same school district had passed the test by the spring of 2000. The percentages are lower for African-American and Latino students. Ninety-six percent of White students had passed by that time, compared with 88% of African American students and 87% of Latino students.



Source: Texas Education Agency, Academic Excellence Indicator System, 1999-2000 State Performance Report.

The number of students who don't pass the exit exam dwindles even further if one examines whether students are able to pass the test after the allotted eight tries. According to an analysis of TEA data by Edward Fuller of the University of Austin's Charles A Dana Center, only 2.13% of students fail to pass the exam by their eighth attempt in 1999.

Teaching to the Test?

Critics of the Texas education system charge that scores on TAAS have increased substantially because teachers there are narrowly "teaching to the test." That is, they instruct students how to answer specific test questions, or forms of test questions, rather than teaching the knowledge and skills that will enable students pass the tests. In other words, when knowledge is only good for test-taking, it's really not much good at all.

Undoubtedly, those critics have a point. Although there are no hard data on just how widespread the practice is, some Texas teachers probably spend too much time teaching *about* the test rather than teaching the curriculum. In a book published last year called *Contradictions of School Reform: Educational Costs of Standardized Testing*, Rice University professor Linda M. McNeil

presents case studies describing how high-stakes TAAS testing can lead urban schools into a kind of "defensive teaching," narrowing the curriculum so that students can pass the tests.

However, along with standards documents and curriculum frameworks, test questions are meant to provide useful guidance for instruction in standards-based systems. And other Texas researchers argue that shallow approaches that narrow instruction are not the inevitable outcome of higher standards and high-stakes testing. In fact, they contend that tests can have quite the opposite effect depending on how school leaders and classroom teachers decide to respond to new challenges.

For example, a September 2000 study by the Charles A. Dana Center, *Equity-Driven Achievement-Focused School Districts*, shows how the Texas accountability system, including the TAAS exams, acted as a catalyst for four large Texas districts to change their *administrative and instructional* practices in order to raise academic achievement and close test score gaps between groups. According to the authors, "These radical changes [in state education policy] became the basis or the initiation of the successful changes in the four study districts." (The report is available at http://www.utdanacenter.org/.)

NAEP Scores Reveal Real Progress In Some Grades and Subjects

If what ultimately matters is that children learn and, over time, master complex kinds of knowledge and skills, then results from the state's participation in the National Assessment of Educational Progress (NAEP) should provide a useful check. First, the NAEP tests are considered by many testing experts to be high-quality assessments that cover a range of skills and knowledge—from basic to very sophisticated. Second, each NAEP subject exam covers a very broad range of topics and is administered only to a representative sample of students, which means that teachers anywhere would have difficulty "teaching to" NAEP in objectionably "narrow" ways.

A careful examination of Texas NAEP scores over the past decade offers some evidence to suggest that substantial improvements in teaching and learning have taken place there, but not across the board. Specifically, Texas students improved dramatically on NAEP's 4th grade math

exam. Moreover, on two exams—1996 4th grade mathematics and 1998 8th grade writing—Texas students scored higher than the national average and at or near the very top among states.

The following provides a more complete description of the state's progress and performance on recent NAEP assessments. *Because the aim of this paper is to examine the impact of Texas education reforms after the state's accountability system was put in place in 1993, the analysis examines changes in NAEP scores that occurred after that point in time.* Readers interested in NAEP trends over the entire decade can find them at http://nces.ed.gov/nationsreportcard or, beginning in May, at the Education Trust's Web site, http://www.edtrust.org (click on "Education Watch Online").

1996 Mathematics Assessment

• Texas ranked among the top states on NAEP's 1996 4th grade math assessment, with Texas students tied for the highest gain in math achievement from 1992 to 1996.

• African-American 4th graders in Texas scored well above the national average for that group on the 1996 math test, and they outscored their peers in every other state. Latino students also scored well above the national average, and they outscored their peers in all but one state.

• Texas 8th graders scored at about the national average on the 1996 math test. African-American and Latino students scored somewhat higher than the national average for those groups of students, by seven points and six points respectively.

1998 Reading Assessment

• Texas 4th graders scored at about the national average on NAEP's 1998 fourth grade reading assessment, with gains between 1994 and 1998 that also reflected the national average.

• African-American and Latino 4th graders in Texas scored somewhat above the national reading average for those groups, by four points and nine points respectively.

• Texas 8th graders also scored at about the national average on the 1998 NAEP reading exam.

• African-American and Latino 8th graders in Texas scored somewhat above the national reading average for those groups, again by four points and nine points respectively.

1996 8th Grade Science Assessment

• Texas 8th graders overall scored just below the national average on NAEP's 1996 8th grade science exam, the only year it has been given.

• African-American 8th graders in Texas scored seven points higher than the national science average for that group, while Latino students scored two points higher.

1998 8th Grade Writing Assessment

• Texas scored above the national average and ranked among the top states in NAEP's 1998 8th grade writing assessment, the only year it has been given, with only one state – Connecticut – achieving an average score that was statistically higher.

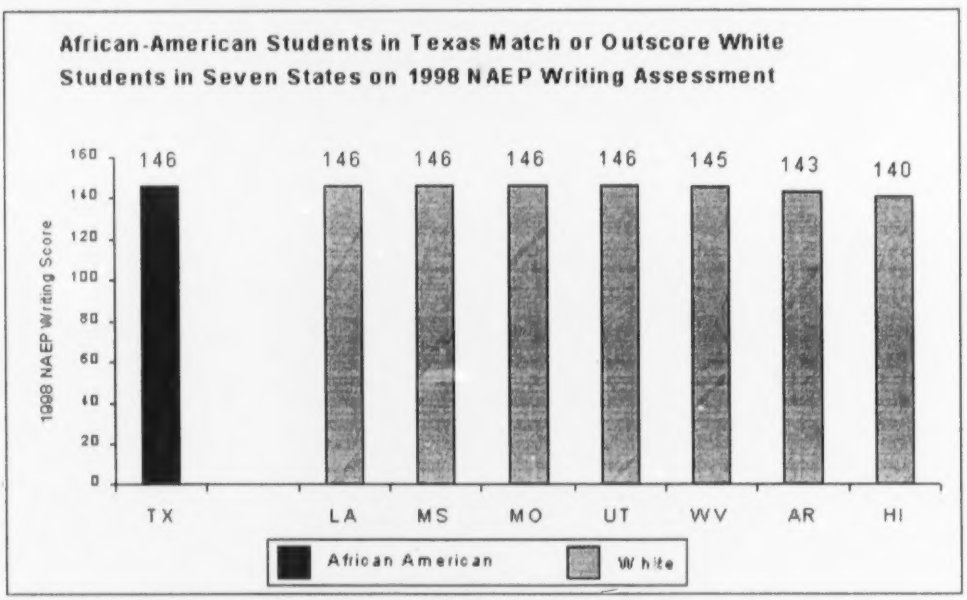
• African-American 8th graders in Texas scored well above the national average for such students on the 1998 writing test, and they outscored their peers in every other state. Latino students also scored well above the national average, and they outscored their peers in all but one state.

A NAEP Snapshot: Texas and the National as a Whole				
		Texas	**Nation**	**Difference** (Texas minus Nation)
4th Grade Math (1996)	All Students	229	222	+ 7
	African American	212	200	+ 12
	Latino	216	205	+ 11
	White	242	231	+ 11
	Low-Income	215	207	+ 8
8th Grade Math (1996)	All Students	270	271	- 1
	African American	249	242	+ 7
	Latino	256	250	+ 6
	White	285	281	+ 4
	Low-Income	252	252	0
8th Grade Science (1996)	All Students	145	149	- 4
	African American	127	120	+ 7
	Latino	129	128	+ 1
	White	161	159	+ 2
	Low-Income	130	133	- 3
4th Grade Reading (1998)	All Students	217	215	+ 2
	African American	197	193	+ 4
	Latino	204	195	+ 9
	White	232	225	+ 7
	Low-Income	203	198	+ 5
8th Grade Reading (1998)	All Students	262	261	+ 1
	African American	245	241	+ 4
	Latino	252	243	+ 9
	White	273	270	+ 3
	Low-Income	248	246	+ 2
8th Grade Writing (1998)	All Students	154	148	+ 6
	African American	146	130	+ 16
	Latino	144	129	+ 15
	White	164	156	+ 8
	Low-Income	141	131	+ 10

NOTE: "+" Denotes that Texas score is higher than national average, while "–" denotes the reverse.
Table does not take into account whether differences are statistically significant.
Source: National Center for Education Statistics. Calculations by the Education Trust.

The Texas writing results in particular are quite dramatic. Twenty percent of African-American and Latino 8th graders met or exceeded NAEP's "proficient" level on the NAEP writing test. For Latino students, that was twice the national average. For African American students, that was nearly three times the national average, and five percentage points higher than the next highest

state. Indeed, the state's African American students managed a kind of first on NAEP assessments by achieving an average score in writing that matched or exceeded the average score for White students in seven other states.



Source: Education Trust analysis of data from National Center for Education Statistics.

As RAND researcher David Grissmer has argued, the NAEP data suggest that Texas is outpacing most other states when it comes to improving the achievement of low-income and minority students. According to calculations by the Education Trust

- If African-American fourth graders everywhere scored as well as those in Texas, the national achievement gap between White and African American fourth graders in math would shrink by a third.
- If African-American eighth graders everywhere wrote as well as their peers in Texas, the national achievement gap between White and African American eighth graders would be cut in half.

Some critics charge that because Texas students have shown less overall improvement on NAEP results than on TAAS, the TAAS gains must be inflated. That ignores a fundamental fact about standards-based assessment: teachers align their instruction to the test meant to measure the state's own curriculum and for which they are being held accountable, which in this case is TAAS. Far from showing that substantial numbers of Texas teachers are "dumbing down" their instruction or narrowly "teaching to" TAAS, the state's NAEP results suggest that Texas

students are making real progress in mastering the kinds of challenging content and skills measured by tests like NAEP.

Other recently released test scores lend additional support to that interpretation. Along with 12 other states, Texas participated in a benchmarking project conducted as part of the 1999 Third International Math and Science Study (TIMSS), with a sample of the state's 8th graders taking the same math and science tests as students in 37 countries and across United States. The United States scored higher than the international average in both subjects.

Statistically, Texas scored neither above nor below the international average on the TIMSS science exam; however, the state's students did score above the international average on the math assessment. In fact, although Texas had the highest proportion of low-income and minority students among the 13 participating states, only Michigan achieved a higher average math score. Moreover, Texas had far and away the highest percentage of students reaching both of the upper performance benchmarks on the TIMSS test, with 13% of its 8th graders scoring among the top 10% of students internationally and 37% of its students landing in the top-performing quarter of students internationally.

Texas Scores Big on the 1999 TIMSS Math Assessment

Low-Income Students		Minority Students		Average Math Score		Students Scoring in Top 10% Internationally		Students Scoring in Top Quarter Internationally	
Texas	***48%***	***Texas***	***53%***	Michigan	517	***Texas***	***13%***	***Texas***	***37%***
South Carolina	45%	Maryland	45%	***Texas***	***516***	Connecticut	11%	Michigan	33%
North Carolina	44%	North Carolina	38%	Indiana	515	Illinois	10%	Oregon	32%
Idaho	37%	South Carolina	37%	Oregon	514	Massachusetts	10%	Connecticut	31%
Missouri	34%	Illinois	35%	Massachusetts	513	Michigan	10%	Massachusetts	31%
Oregon	33%	Connecticut	26%	Connecticut	512	Oregon	10%	Indiana	30%
Illinois	31%	Massachusetts	26%	Illinois	509	South Carolina	10%	South Carolina	30%
Pennsylvania	30%	Missouri	22%	Pennsylvania	507	Indiana	9%	Illinois	29%
Massachusetts	28%	Pennsylvania	22%	South Carolina	502	Pennsylvania	9%	Pennsylvania	28%
Maryland	28%	Oregon	20%	North Carolina	495	Maryland	8%	Maryland	27%
Indiana	25%	Michigan	18%	Idaho	495	North Carolina	7%	North Carolina	25%
Connecticut	20%	Idaho	17%	Maryland	495	Idaho	5%	Idaho	24%
Michigan	17%	Indiana	17%	Missouri	490	Missouri	4%	Missouri	20%

NOTE: Table does not take into account whether differences are statistically significant. "Low-income students" are those who are eligible for free or reduced price lunch.
Source: International Study Center, "Mathematics Benchmarking Report: TIMSS 1999 – 8th Grade," April 2001

In fact, there are important lessons in the Texas results on external exams like NAEP and TIMSS. Texas students are proving, particularly in math and writing, that states with high proportions of poor and minority students need not always score near the bottom on such tests. Indeed, they can achieve at or near the very top.

Unfortunately, Texas has not made the same kind of progress in closing racial and ethnic achievement gaps on NAEP assessments as it has on TAAS exams. Of the six gaps measurable across subjects, grade levels, and groups, NAEP data show that gaps decreased in three areas, stayed the same in one, and increased in two, although it is not clear from available sources whether any of these changes were statistically significant.

Racial/Ethnic Progress and Gaps on NAEP Assessments

		White	African American	Latino	African American-White Gap	Latino-White Gap
4th Grade Reading	1998	232	197	204	35	28
	1994	227	191	198	36	29
	Change, 1994-98	**+ 5**	**+ 6**	**+ 6**	**- 1**	**- 1**
4th Grade Math	1996	242	212	216	30	26
	1992	229	199	209	30	20
	Change, 1992-96	**+ 13**	**+ 13**	**+ 7**	**0**	**+ 6**
8th Grade Math	1996	285	249	256	36	29
	1992	279	244	249	35	30
	Change, 1992-96	**+ 6**	**+ 5**	**+ 7**	**+ 1**	**- 1**

NOTE: Does not take into account whether difference is statistically significant.
Source: National Center for Education Statistics. Calculations by the Education Trust.

A recent analysis of NAEP data conducted by Paul E. Barton for the National Education Goals Panel reached much the same conclusion about achievement gaps in Texas. That study, which examined gaps on all NAEP exams over the entire course of the decade, found that Texas made strong, across-the-board improvements in math, while the gap between high and low performers and between White and minority students stayed about the same. Texas made less overall improvement in reading, and reading scores increased among high performers at a greater rate than among low performers. While Texas was not among the 16 states showing statistically significant growth in the reading gap between low and high performers, that gap could grow in the future if top performers in Texas keep gaining in reading while those at the botom do not.

The good news is that all students in Texas are improving on NAEP, and that certainly should continue to be a goal. The challenge before policymakers and educators now is to repeat the kind of gap reduction that took place on the TAAS tests—narrow the NAEP gaps by dramatically accelerating the improvement of poor and minority students while continuing to improve the scores of White students.

High School Completion Rates Have Improved

The most troubling criticism to be leveled at the Texas reforms is that they have drastically elevated the state's high school retention and dropout rates. Indeed, some critics have argued that improvements on TAAS largely are *due* to higher dropout rates. However, as with NAEP scores, a clear-eyed examination of the hard data paints a more complex—and more encouraging—picture.

9th Grade Retention Rates

According to data reported by the states to the U.S. Department of Education, the number of Texas ninth graders in any given year is about 20% higher than the number of 8th graders in the state's schools during the preceding year. Critics of the Texas reforms have offered this statistic to suggest that a large number of 9th graders are being retained in that grade by Texas high schools in order to make them look better on the 10th grade TAAS exams.

However, nearly every state has what education experts have come to recognize as a "ninth grade bump," probably due to retention of students who enter that grade unprepared for high-school-level work. Nationally, this bump, which provides a gross estimate of the 9th grade retention rate, was about 13% for 9th graders in 1999-2000. The bottom line is that while the 20% bump in Texas *is* relatively high—about half again as large as the weighted national average and fifth largest among the 50 states and the District of Columbia—it is not unique.

Estimated 9th Grade Retention Rates in Largest States and U.S.

	8th Graders in 1998-99	9th Graders in 1999-2000	Difference
Texas	299,760	359,368	+20%
New York	200,097	252,864	+26%
Florida	179,066	223,743	+25%
California	424,768	482,355	+14%
U.S.	3,480,233	3,934,899	+13%

Source: National Center for Education Statistics. Calculations by the Education Trust.

Dropout and Completion Rates

Data from the Texas Education Agency show dropout rates declining for all groups from 1994 to 2000. However, because the TEA rates have been the center of some controversy, longitudinal enrollment data provide a useful check.

One-Year Dropout Rate, Grades 7-12

	1994	2000	Change
All Students	2.8%	1.6%	-1.2%
African American	3.6%	2.3%	-1.3%
Latino	4.2%	2.3%	-1.9%
White	1.7%	0.8%	-0.9%
Low-Income	2.9%	1.5%	-1.4%

Source: Texas Education Agency.

Some researchers and newspapers have compared the number of Texas high school diploma recipients to the number of 9th graders three years earlier, a ratio that serves as a kind of proxy completion rate. However, because of the 9th grade bump discussed above, such analyses invariably deflate the completion rate while inflating the gap between groups. The best way to construct an estimated completion rate is to compare the number of high school graduates, considering only "regular" diplomas and excluding GEDs or other "alternative" diplomas, against the number of 8th graders four years earlier. This rough 8th-grade-to-graduation figure is currently the best available estimate of the state's actual on-time completion rate.

To find out whether completion rates actually have fallen in Texas, we conducted an analysis of federal enrollment and graduation data using precisely that definition. The analysis reveals precisely the opposite of what the critics claim. Completion rates in Texas *actually have been increasing* since the accountability system was fully introduced in 1993, from about 67.6% for the class of 1993 to about 72.4% for the class of 1999, the last year for which data are currently available. Moreover, that improvement bucks that national trend over the same period. While the Texas rate increased by nearly 5 percentage points from 1993 to 1999, the national completion rate declined by about 3 percentage points over the same period. Completion rates also declined in 43 other states and the District of Columbia.

NOTE: Analysis considers only regula r diploma recipients.

Source: Education Trust analysis of data from the National Center for Education Statistics.

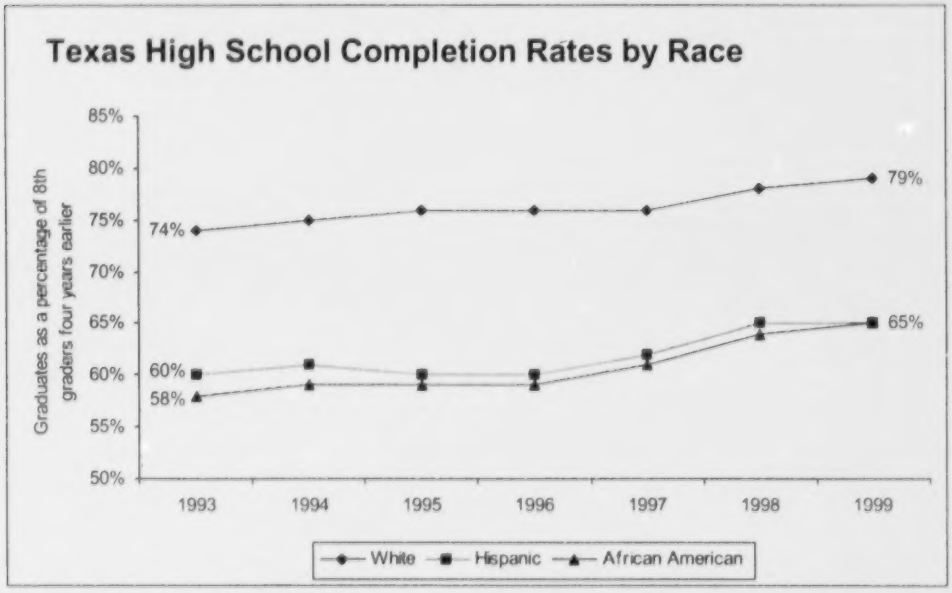
Just for the Kids, an independent Texas-based organization that helps schools and districts analyze student achievement data, has conducted a similar analysis examining rates for different groups of Texas students over time. That analysis shows that rates for African American, Latino, and White students all increased from 1993 to 1999, by five percentage points each among White and Latino students and seven percentage points among African American students.

Estimated High School Completion Rates in Texas

Graduates vs. 8th Graders Four Years Earlier

	African American	Latino	White
1993	58%	60%	74%
1994	59%	61%	75%
1995	59%	60%	76%
1996	59%	60%	76%
1997	61%	62%	76%
1998	64%	65%	78%
1999	65%	65%	79%

Source: Just for the Kids, unpublished analysis.



Source: Just for the Kids, unpublished analysis.

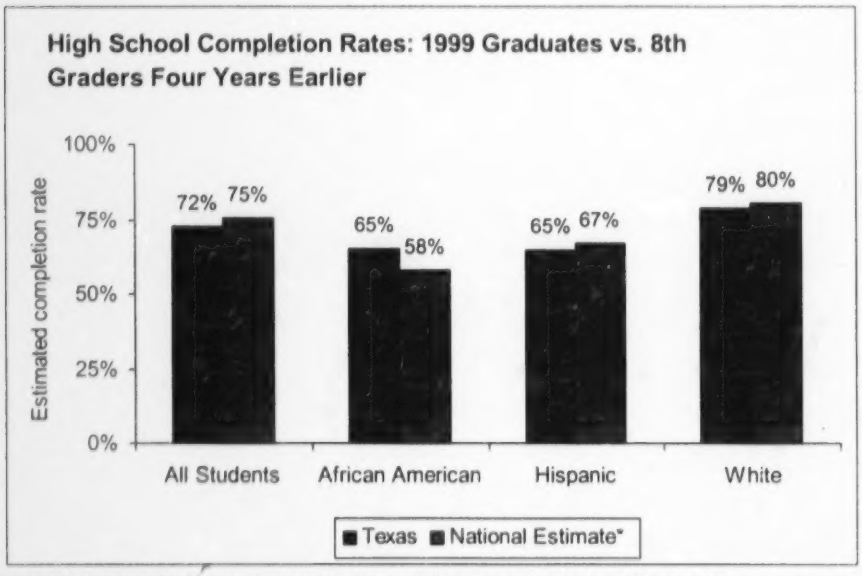
Finally, the Education Trust conducted an analysis of current completion rates for different groups of students across the states and the nation as a whole. The numbers show that White and Latino students in Texas trail the national average by one point and three points respectively. However, the completion rate for African-American students in Texas is *seven points higher* than the estimated national average for such students.

Estimated High School Completion Rates

Graduates vs. 8th Graders Four Years Earlier

	Texas	National Estimate*	Difference (Texas minus National Estimate)	Texas Rank
All Students	72%	75%	- 3%	37/51
African American	65%	58%	+ 7%	18/43
Latino	65%	67%	- 2%	33/43
White	79%	80%	- 1%	24/43

* National estimates for African -American, Latino, and White students based on 43 states that provide d data disaggregated by race/ethnicity. Missing states are ID, KY, NH, ND, SC, TN, UT, and VT.
Source: Education Trust analysis of data from National Center for Education Statistics.



* National estimates for African -American, Latino, and White students based on 43 states that provided data disaggregated by race/ethnicity. Missing states are ID, KY, NH, ND, SC, TN, UT, and VT.
Source: Education Trust analysis of data from National Center for Education Statistics.

These data provide remarkable evidence that students and schools can and do adjust to higher academic standards. High school completion rates in Texas have been *rising* for all students since the introduction of the exit exam and the school- and district-level accountability system in the early 1990s. And they have risen steadily even as the state regularly notched up the passing rate it uses hold schools accountable for student performance. Clearly, the vast majority of Texas high schools *cannot* be encouraging students to drop out so they can look better on the 10th grade test, or these completion data would appear quite different.

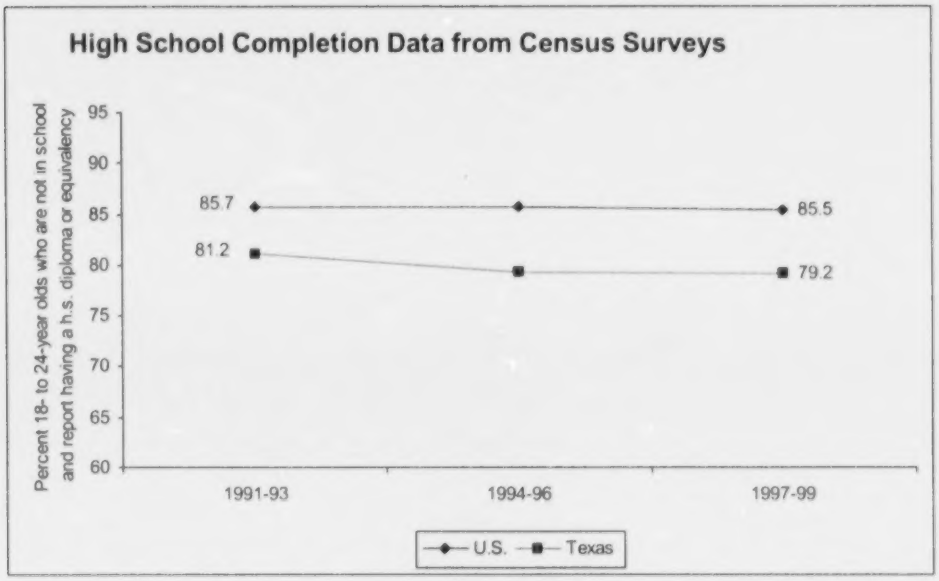
Additional confirmation comes from a study being conducted by Stanford University researchers using sophisticated mathematical techniques to study the relationship between dropout rates and TAAS passing rates in Texas high schools. In a paper delivered at a January 2001 Harvard University conference on dropout rates, a team led by Martin Carnoy found a positive relationship between larger *increases* in passing rates on the 10th grade TAAS test and larger *decreases* in dropout rates. The relationship is strongest among urban high schools serving low-income students. (See Martin Carnoy, Susanna Loeb, and Tiffany L. Smith, "Do Higher State Test Scores in Texas Make for Better High School Outcomes?" unpublished paper, December 2000.)

Taken together, these data suggest that while some students need extra time to meet the high school standards, a predictable consequence of standards-based reforms, they do not inevitably drop out as a consequence.

Unfortunately, dropout and completion data are never that neat. While we believe that our analysis is the best that can be conducted given the available information, other data sources suggest Texas is not doing quite so well when it comes to high school completion.

For example, the National Center for Education Statistics uses data from an annual U.S. Census Bureau survey, in which 18- to 24-year-olds who are not enrolled in high school or below are asked whether they have a high school diploma. Because the sample sizes are small, the NCES averages together three years worth of data. The resulting rates are generally higher than the completion rates discussed above because they include older individuals who may have obtained a diploma after age 18, and because they include GED and other "alternative" diplomas.

According to completion rates for 18- to 24-year-olds estimated from Census Bureau data, Texas is among 30 states where the rate has actually decreased over the 1990s, from a three-year average of 81.2% for 1991-93 to a three-year average of 79.2% for 1997-99. Moreover, the Texas rate for 1997-99 is about six percentage points lower than the national average of 85.5% using this statistic, and places Texas at 48th among the 50 states and the District of Columbia.



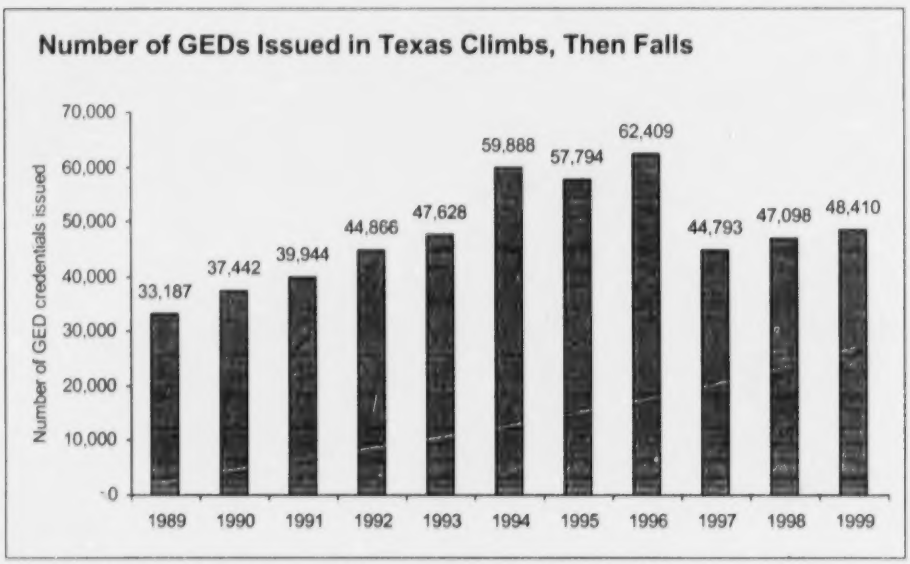
One should keep in mind that these two kinds of completion estimates differ methodologically from each other in several important ways. First, the data from annual October Census surveys count GEDs and other alternative certificates, while the 8th-grade-to-graduation estimates count only regular diplomas. Second, the annual Census survey includes individuals up to 24 years old, while the 8th-grade-to-graduation figure only counts students still in the K-12 education system; that means the Census survey includes adults who might not even have been educated in the state's public schools. Even so, such differences in dropout and completion rates using different data sources and methodologies continue to vex efforts by researchers and policymakers to pin down the problem. (See Philip Kaufman, "The National Dropout Data Collection System: Assessing Consistency," Harvard Civil Rights Project, January 2001.)

But the bottom line remains the same: Even if the Texas completion rate did really drop by two percentage points over the course of the 1990s, that is still a much smaller decline than many critics claim, and one that cannot explain the steep climb in TAASpassing rates or improvements in NAEP scores.

Are Texas Students Earning More GED Diplomas?

Some critics suggest that Texas has seen a massive surge in the number of students earning GEDs instead of regular credentials. Again, however, a more detailed examination of the numbers paints a more complex and less bleak picture.

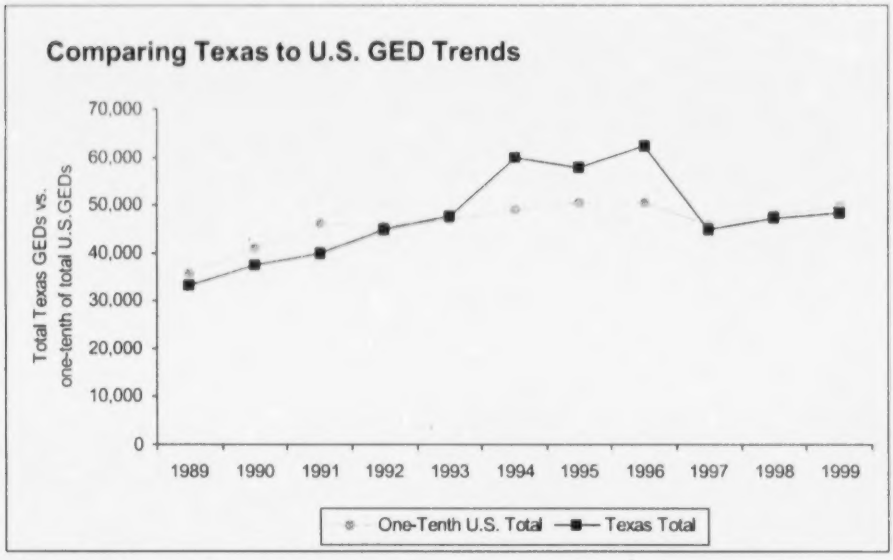
First, while the number of GED credentials awarded each year increased steadily in Texas from 1989 to 1993, and then dramatically increased from 1993 to 1996, those numbers began increasing well before the introduction of the TAAS exit exam in 1992. Second, the number of GEDs earned by Texans *dropped* dramatically from 1996 to 1997—to just about exactly where the figure had been in 1992. Since 1997 the number has been inching upagain, although more slowly than in the early part of the decade.



Source: American Council on Education, GED Statistical Reports for 1999 and for 1994.

But can the overall increase be linked to the state's accountability policies? One way to find out is to compare the Texas trend with similar figures for the nation as a whole. For ease of comparison, the Education Trust analyzed the Texas trend against changes in one-tenth the number of GEDs awarded nationally over the same time period. The analysis reveals that the GED trend in Texas closely paralleled the national trend from 1989 to 1993. Texas pulled away

from the national trend when GEDs shot upward from 1993 to 1994 and stayed at that higher level until 1996. However, in the years since the Texas figure dropped between 1996 and 1997, the national and Texas trends once again have become nearly identical. In fact, except for the big increase and subsequent decrease between 1993 and 1997, trends in the number of GEDs earned by Texas citizens almost exactly match the national trend over the same ten-year period.

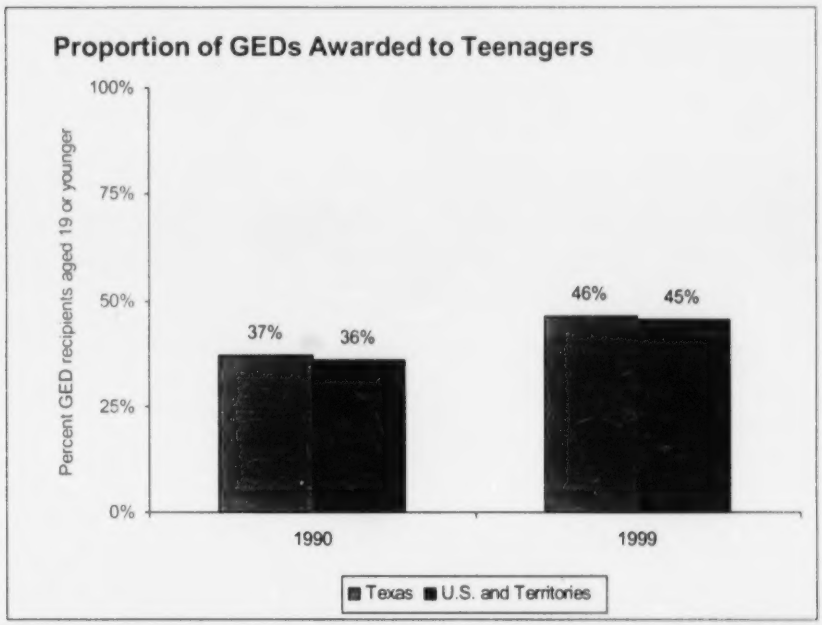


NOTE: U.S. data do not represent actual numbers of GEDs. The one -tenth conversion is meant facilitate comparison of Texas and U.S. *trend lines*.
Source: Americ an Council on Education, GED Statistical Reports for 1999 and for 1994. Calculations by the Education Trust.

What about the age of GED recipients? If, as some critics have suggested, the proportion of GEDs going to teenagers has rapidly and substantially increased in Texas, that too could be a sign that high school students are "opting out" of the system—and its exit exam requirement—to obtain nontraditional diplomas.

Once again, however, a thorough analysis of historical GED statistics shows that Texashas hewed remarkably close to national trends in GED credentials. The proportion of Texas GEDs earned by individuals aged 19 and under increased from 37% in 1990 to 46% in 1999, a change of nine percentage points. However, the proportion of all GEDs going to teens *also* increased by nine percentage points over the same time span—from 36% in 1990 to 45% in 1999. Because the "downward drift" in the age of Texas GED recipients nearly exactly matches a similar

national trend, that change cannot easily be attributed to the state's introduction of tougher accountability policies early in the last decade.



Source: American Council on Education, GED Statistical Reports for 1990 through 1999. Calculations by the Education Trust.

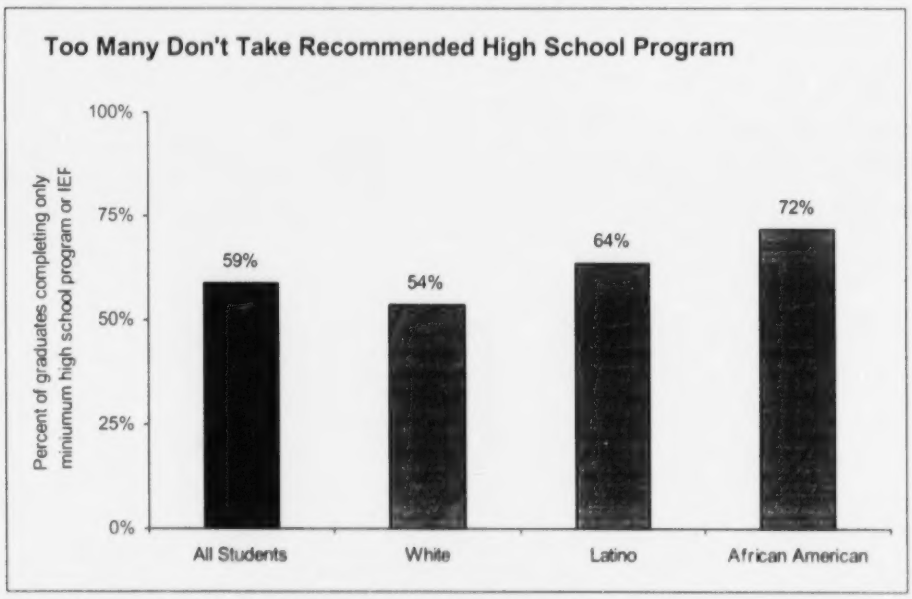
While some critics have painted an oversimplified picture of GED attainment in Texas, state officials there should not become complacent about the issue. Texans earn more GEDs than do the citizens of any other state in the nation—about one-tenth of all GEDs issued across the 50 states and D.C. in 1999. Research has shown that, on average, GED recipients have smaller incomes than individuals with traditional diplomas. While the above analysis shows that the disproportionately high number of GED recipients in Texas probably was not caused the state's education reforms of the early 1990s, educators and state officials should redouble their efforts to encourage all teenagers to earn a regular high school diploma.

The Missing Piece of the Puzzle: High School and Beyond

While Texas has had some success improving learning for all student groups over the past decade, particularly in raising the basic skills of elementary and middle school youngsters, the state has not done as well by its high school students. Increases in passing rates on the 10th grade

exit exam mean that more high school students are graduating with at least 8th-grade-level reading and math skills. But the goal should be for every high school student to graduate with mastery of high-level knowledge and skills and prepared to enroll in higher education without having to take remedial coursework.

That goal also is important when it comes to preparing students for challenging careers after college. The Texas Business and Education Coalition helped the state create a "recommended high school program" in 1993, and has been one of the program's most vigorous supporters since then. Unfortunately, too many Texas high school students still miss out on the recommended high school program. Fifty-nine percent of 1999 graduates failed to complete the recommended program, which includes more upper-level classes and is meant to better reflect the kind of preparation colleges look for. That number jumps to 64% of Latino students and 72% of African American students, compared with 54% of White students.



Source: Education Trust calculations based on Texas Education Agency data.

These numbers have real implications for graduates. In a study released last year, Omar Lopez of Just for the Kids found that Texas high school graduates who complete the recommended program, honors, or advanced high school programs are more likely to enroll in college; aspire to a bachelors degree; and attain a higher freshman-year grade point average than graduates who complete only the minimum program. He also found that high school graduates who complete

the more advanced programs also are more likely to stay in higher education after their first year and second year than high school students who complete the minimum program. (See Omar Lopez, "The Relationship of Texas High School Curriculum to College Readiness: An Update," unpublished paper, December 2000.)

So perhaps it should come as no surprise that several influential state-by-state report cards put Texas near the bottom on higher education participation rates. According to the latest *National Education Goals Report*, Texas ranks 34th among the 50 states and D.C. for the percentage of graduates who go immediately on to two- or four-year colleges, with 54% of graduates doing so in 1996. According to *Measuring Up 2000*, a report by the National Center for Public Policy and Higher Education, only 58% of Texas graduates enroll in college within four years of graduation, ranking it 45th among the 50 states on that measure.

Fortunately, state leaders are aware of this "higher education gap." Lawmakers are considering a bill that would make the recommended high school program required for all students. The proposal has been touted by the state's new governor and also has support of the Texas Higher Education Coordinating Board.

Conclusion

Like other states, Texas still has a long way to go until its schools educate *all* students to *high* standards. But the state has achieved some real successes over the past decade, particularly in raising the basic skills of its poor and minority students. Those successes primarily have been due to the state's pragmatic yet fiercely equity-driven approach to school accountability, an approach that places Texas among the pacesetters in state education reform. One small price for that leadership has been intense scrutiny, and no small amount of browbeating, from the education research community and the media.

The lessons, then, are clear. If the state can maintain its focus on equitable results while raising its academic standards even higher, the next decade of Texas education reform should prove at least as successful—and perhaps just as provocative—as the first.